

INTERNATIONAL SEARCH REPORT

ational Application No
/US2004/024334

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D263/20 C07D413/06 C07D413/12 A61K31/421 A61K31/422

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	EP 0 694 543 A (BAYER AG) 31 January 1996 (1996-01-31) page 91 - page 94; claim 1 page 83; examples 124, 125 page 2, line 3 - line 4 -----	1-8, 10-17, 20-23, 26-45
Y	EP 0 352 781 A (E.I. DU PONT DE NEMOURS AND COMPANY) 31 January 1990 (1990-01-31) page 51 - page 54; claim 1 page 2, line 4 - line 6 ----- -/-	1-8, 10-17, 20-23, 26-45



Further documents are listed in the continuation of box C



Patent family members are listed in annex

* Special categories of cited documents

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the International filing date
- 'L' document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the international filing date but later than the priority date claimed

'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

'X' document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

'Y' document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

'&' document member of the same patent family

Date of the actual completion of the international search

8 August 2005

Date of mailing of the international search report

24. 11. 2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	<p>BRICKNER S J : "OXAZOLIDINONE ANTIBACTERIAL AGENTS"</p> <p>CURRENT PHARMACEUTICAL DESIGN, BENTHAM SCIENCE PUBLISHERS, SCHIPHOL, NL, vol . 2, 1996, pages 175-194 , XP001007528 ISSN: 1381-6128</p> <p>the whole document; in particular, page 187, Figure (2) ; and page 189, column 2, last paragraph - page 190, column 2, Table IX</p>	<p>1-8, 10-17, 20-23, 26-45</p>
A	<p>wo 01/94342 A (DONG A PHARM. CO. , LTD; LEE, JAE-GUL; LEEM, WON-BIN; CHO, JONG-HWAN; C)</p> <p>13 December 2001 (2001-12-13)</p> <p>page 163 - page 170; claim 1</p> <p>page 107 ; example 80</p> <p>page 98; example 63</p> <p>page 1, paragraph 1</p>	<p>1-8, 10-17, 20-23, 26-45</p>
X	<p>wo 01/81350 A (ASTRAZENECA AB; ASTRAZENECA UK LIMITED; GRAVESTOCK, MICHAEL, BARRY; BE) 1 November 2001 (2001-11-01)</p> <p>page 127 - page 134; claim 1</p> <p>page 139 ; claim 12</p>	<p>1-8, 12, 14, 16, 20, 22, 26-34, 41-43</p>
E	<p>wo 2005/012271 A (RIB-X PHARMACEUTICALS, INC ; WU, YUSHENG ; CHEN, SHILI ; CHEN, YI ; HANSEL) 10 February 2005 (2005-02-10)</p> <p>page 66 - page 68; examples 6,7; compounds 66,67</p> <p>page 75 - page 78; example 13; compounds 155, 156</p>	<p>1-6,8, 10, 11, 13-17, 26-30, 32-45</p>
E	<p>wo 2005/019211 A (RIB-X PHARMACEUTICALS, INC ; ZHOU, JIACHENG ; BHATTACHARJEE, ASHOKE ; CHE) 3 March 2005 (2005-03-03)</p> <p>page 173 - page 176; example 13; compounds 96,97</p> <p>page 192; example 27; compound 127</p> <p>page 217 - page 219; example 54; compound 402</p>	<p>1-6,8, 10, 11, 13-17, 30, 32-45</p>

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

- 1 ☐ Claims Nos
because they relate to subject matter not required to be searched by this Authority, namely

- 2 ☒ Claims Nos
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically

see FURTHER INFORMATION sheet PCT/ISA/210

- 3 ☐ Claims Nos
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application as follows

see additional sheet

- 1 ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims

- 2 ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee

- 3 ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid. Specifically, Claims Nos

- 4 ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims, it is covered by claims Nos

see annex

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest
- ☐ No protest accompanied the payment of additional search fees

Continuation of Box II.2

Present claims 1-45 relate to "prodrugs" of the compounds of the present general formula.

The term "prodrug" is considered to lead to a lack of clarity within the meaning of Article 6 PCT because this term does not comprise any information as regards the structure of the compounds concerned. It is therefore impossible to compare the said "prodrug" compounds with what is set out in the prior art. The lack of clarity is such as to render a meaningful complete search impossible. Consequently, the said "prodrugs" have not been searched.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8 (all partly), 10-15 (all partly), 16, 17, 20 (partly), 21 (partly), 22, 23 and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group and A and B are phenyl ;

2. claims: 1-4 (all partly), 8 (partly), 10-13 (partly) and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group, A is phenyl, B is selected from pyridyl, pyrazinyl, pyrimidinyl and pyridazinyl, X is -NR₄-, and M is other than formyl and Cl-4acyl ;

3. claims: 1-4 (all partly), 8 (partly), 10-13 (partly), 26-29 (all partly) and 32-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group, A is phenyl, B is selected from pyridyl, pyrazinyl, pyrimidinyl and pyridazinyl, and X is -NR₄NR₄-;

4. claims: 1-4 (all partly), 8 (partly), 10-13 (partly), 26-29 (all partly) and 32-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group, A is phenyl, B is selected from pyridyl, pyrazinyl, pyrimidinyl and pyridazinyl, and X is -S-;

5. claims: 1-7 (all partly), 9-15 (all partly), 18, 19, 20 (partly), 21 (partly), 24, 25 and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group, A is selected from pyridyl, pyrazinyl, pyrimidinyl and pyridazinyl, B is phenyl, and X is -NR₄- or -NR₄NR₄-;

6. claims: 1-7 (all partly), 9-15 (all partly), 18, 19, 20 (partly), 21 (partly), 24, 25, 26-29 (all partly) and 32-45 (all partly) ;

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-oxazolidin-3-yl group, A is selected from pyridyl, pyrazinyl, pyrimidinyl and pyridazinyl, B is phenyl, and X is -S-, and M is other than acetyl ;

7. claims: 1 (partly), 4-12 (all partly) and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 2-(R₃-CH₂)-5-oxo-isoxazolin-4-yl group;

8. claims: 1 (partly), 4-12 (all partly) and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-isoxazolin-3-yl group;

9. claims: 1 (partly), 4-12 (all partly) and 26-45 (all partly);

the compounds of the present claim 1 wherein Het-CH₂-R₃ represents a 5-(R₃-CH₂)-2-oxo-5H-furan-3-yl group;

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Information on patent family members

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